

August 20, 2009

LIQUITECH INCORPORATED
TORY SCHIRA
421 EISENHOWER LANE SOUTH
LOMBARD IL 60148

Re: Description: WATER TREATMENT DEVICE - COPPER/SILVER ION GENERATOR
Manufacturer: LIQUITECH INCORPORATED
Product Name: LIQUITECH IONIZATION SYSTEMS (POE)
Model Number(s): LC05XLTF, LC05QLTF, LC1XLTF, LC1QLTF, LC2XLTF, LC2QLTF, LC3XLTF,
LC3QLTF, LC5XLTF, LC5QLTF, LC7XLTF, LC7QLTF, LC10XLTF, LC10QLTF,
XLTC05XLTF, XLTC05QLTF, XLTC1XLTF, XLTC1QLTF, XLTC2XLTF,
XLTC2QLTF, XLTC3XLTF, XLTC3QLTF, XLTC5XLTF, XLTC5QLTF,
XLTC7XLTF, XLTC7QLTF, XLTC10XLTF, XLTC10QLTF, (POE)
Product File No: 20090214

The specifications and/or plans for this plumbing product have been reviewed and determined to be in compliance with chapters Comm 82 through 84, Wisconsin Administrative Code, and Chapters 145 and 160, Wisconsin Statutes.

The Department hereby issues an approval based on the Wisconsin Statutes and the Wisconsin Administrative Code. This approval is valid until the end of August 2014.

This approval is contingent upon compliance with the following stipulation(s):

- This product has undergone sufficient testing to document the product's ability to reduce only those contaminants and/or substances as specified in this approval letter when the product is installed and maintained in strict accordance with the manufacturers published instructions.
- Where the Department of Natural Resources (DNR) has jurisdiction, a written approval may be required prior to installation of this product in a water supply system to reduce the concentration of a contaminant that exceeds the primary drinking water standards contained in ch. NR 809, Wis. Admin. Code, the enforcement standards contained in ch. NR 140, Wis. Admin. Code, or for a water supply system that is subject to a written advisory opinion by the DNR. For more information contact the DNR Section of Private Water Systems, P.O. Box 7921, Madison, WI 53707, telephone (608) 266-3415.
- If these approved devices are modified or additional assertions of function or performance are made, then this approval shall be considered null and void, unless the change is submitted to the department for review and the approval is reaffirmed.
- These devices must be served by electrical circuits protected by ground fault circuit interrupting (GFCI) outlets.
- If these devices are installed on a water supply system constructed of metallic pipe, then a properly sized electrical bonding jumper must be installed such that the electrical continuity of the path to ground is reestablished.
- The residual copper concentration must be ≥ 0.88 mg/l and < 1.3 mg/l.

The residual silver concentration must be ≥ 0.50 g/l and < 100 µg/l.

The residual concentrations of copper and silver must be maintained within the ranges stated above for a minimum of 24 hours, and on an ongoing basis, to achieve the bacterial reduction performance specified in this letter.

- These devices can not be used as a primary and/or sole means of disinfection.

These devices are approved for the reduction of the following nine specific bacteria only:

1. Escherichia coli 0157:H7 [99.9999% (6 log reduction)]
2. Listeria monocytogenes [99.999% (5 log reduction)]
3. Salmonella typhimurium [99.999% (5 log reduction)]
4. Pseudomonas aeruginosa [99.99% (4 log reduction)]
5. Bacillus anthracis [99.9% (3 log reduction)]
6. Legionella pneumophila [99.9999% (6 log reduction)]
7. Acinetobacter baumannii [99.999% (5 log reduction)]
8. Mycobacterium avium [99.99% (4 log reduction)]
9. Stenotrophomonas maltophilia [99.9999% (6 log reduction)]

- These devices can not be used as a primary and/or sole means of disinfection.

There are two reasons for this:

1. The devices have not shown the capability to provide a consistent six log (i.e. 99.9999%) reduction of bacteria; and
2. The devices have not demonstrated the ability to control protozoans and/or viruses.

These devices must be used in conjunction with accepted disinfection methods as described in NR 809.

Based on testing data submitted to and reviewed by the department, this approval recognizes that these plumbing products will reduce the concentration of contaminants as specified on pages 1 through 2 of this letter.

This device was tested under controlled laboratory, or field, conditions. The actual performance of this device for a specific end use installation will vary from the tested conditions based on local factors such as water pressure, water temperature and water chemistry.

The department is in no way endorsing this product or any advertising, and is not responsible for any situation which may result from its use.

Sincerely,

Glen W. Schlueter
Engineering Consultant-Plumbing Product Reviewer
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Safety and Buildings Division
Department of Commerce
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